



NATURAL RESOURCES ASSESSMENT, INC.

**General Biological Assessment
Panorama Properties Development
Assessor's Parcel Map 437-360-009
San Jacinto, California**

Prepared for:

**Panorama Properties, Inc.
2005 Winston Court
Upland, CA 91786**

Prepared by:

**Natural Resources Assessment, Inc.
3415 Valencia Hill Drive
Riverside, California 92507**

March 21, 2018

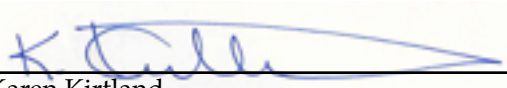
Project Number: BAW16-113

*3415 Valencia Hill Drive
Riverside, California 92507*

*T (951) 686-4483
F (951) 686-8418
nrainc@earthlink.net*

CERTIFICATION

I hereby certify that the statements furnished below and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.



Karen Kirtland

Natural Resources Assessment, Inc.

March 21, 2018

Date

Table of Contents	Page
1.0 Introduction	1
2.0 Site Location and Project Description	1
3.0 Methods	1
3.1 Data Review	1
3.2 Western Riverside County Multiple Species Habitat Conservation Plan.....	1
3.3. Field Assessment.....	4
4.0 Results.....	4
4.1 Weather, Topography and Soils	4
4.2 Land Uses	4
4.3 Plant Communities	6
4.5 MSHCP Consistency Analysis	6
4.5.1 Criteria Area and Narrow Endemic Plant Species.....	7
4.5.2 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2)	7
4.5.2.1 Riparian/Riverine Areas	7
4.5.2.2 Vernal Pools	7
4.5.2.3 Vernal Pool Fairy Shrimp.....	8
4.5.2.4 Riverside Fairy Shrimp	8
4.5.3 Additional Survey Needs and Procedures (Section 6.3.2)	8
4.5.3.1 Burrowing Owl	8
4.5.4 Guidelines Pertaining to the Urban/Wildland Interface (Section 6.1.4)	9
4.5.5 Habitat Conservation Plan for the Stephens Kangaroo Rat	9
4.5.6 Project Relationship to Reserve Assembly, San Jacinto Valley Area Plan (Section 3.3.13)	9
4.6 Jurisdictional Waters	10
4.6.1 Army Corps of Engineers	10
4.6.2 Regional Water Quality Control Board	10
4.6.3 California Department of Fish and Wildlife.....	10
4.7 Raptors, Migratory Birds, and Habitat	11
5.0 Discussion	12
5.1 General Biological Resources	12
5.2 MSHCP Consistency Analysis	12
5.2.1 Criteria Area Plant Species and Narrow Endemic Plant Species	12
5.2.2 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2).....	12
5.2.3 Additional Survey Needs and Procedures (Section 6.3.2).....	12
5.2.4 Guidelines Pertaining to the Urban/Wildlands Interface (Section 6.1.4)	12
5.2.5 Habitat Conservation Plan for the Stephens Kangaroo Rat	12
5.2.6 Project Relationship to Reserve Assembly, San Jacinto Valley Area Plan (Section 3.3.9)	13
5.3 Jurisdictional Waters	13
5.4 Raptors and Nesting Habitats	13
5.5 Habitat Fragmentation and Wildlife Movement	13
6.0 References Cited or Reviewed	14

Figures

1	Regional Vicinity and Project Location Map.....	2
2	Project Aerial Showing 2013 Site Conditions.....	3
3	Original Soils Distribution Mapped by the NRCS.....	5

Photos

1	Disking of the property Looking northeast from the southeast corner	4
2	Ruderal (weedy growth at the northern end of the property. Looking east	6
3	Beechey ground squirrel burrow	7

Appendices

Appendix A - Plants and Animal Species Observed
Appendix B - Definitions of Species Status Classification

1.0 Introduction

Natural Resources Assessment, Inc. (NRAI) was contracted by Blaine A. Womer Civil Engineering on behalf of Panorama Properties to conduct a general biological assessment of a proposed commercial development project located in San Jacinto, California.

The biological assessment was required because of the potential presence on the property of sensitive biological resources as identified in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The MSHCP also requires surveys for the presence of jurisdictional waters, riverine and riparian areas, vernal pools, and fairy shrimp habitat.

2.0 Site Location and Project Description

The property is in the City of San Jacinto (Figures 1 and 2). Residential and rural residential development occurs on all four sides. The property is in the northeast quarter of Section 32, Township 4 south, Range 1 west, Lakeview 7.5 U.S. Geological Survey (USGS) topographic quadrangle, San Bernardino base and meridian (Figure 1).

The project consists of one parcel, Assessor's Parcel Number (APN) 436-360-009, totaling 8.96+acres, located on the northeast corner of Sanderson Avenue and 7th Street.

The proposed project for approval of a General Plan Amendment, Change of Zone and Conditional Use Permit to allow commercial development of a formerly designated residential use property.

3.0 Methods

3.1 Data Review

NRAI conducted a data search for information on plant and wildlife species known occurrences within the vicinity of the property, as well as information on jurisdictional waters. This review included biological texts on general and specific biological resources, and those resources considered to be sensitive by various wildlife agencies, local governmental agencies and interest groups. Information sources included but are not limited to the following:

- Information provided by the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) for the property, APN 460-150-015.
- U.S. Army Corps 404 requirements, State Water Resources Control Board requirements, California Department of Fish and Wildlife 1602 requirements.
- General texts and other documents regarding potential resources on the property

NRAI used the information to focus our survey efforts in the field. Please see Section 6.0 for a complete listing of documents reviewed.

3.2 Western Riverside County Multiple Species Habitat Conservation Plan

The MSHCP is intended to balance the demands of the growth of western Riverside County with the need to preserve open space and protect species of plants and animals that are threatened with extinction. The MSHCP addresses incidental take of "covered" species. Of 146 species addressed in the Western Riverside County MSHCP, 118 are adequately conserved simply by implementing the conservation program. Incidental take of these 118 species is permitted by the Western Riverside County MSHCP. The remaining 28 species are partially conserved – they would be adequately conserved when certain additional conservation requirements are implemented. The additional requirements are identified in the species-specific conservation objectives for those 28 species.



Map Base: Winchester (date unknown) 7.5'
USGS topographic quadrangle

Figure 1. Regional Vicinity and Project Location Map

Commercial Development
Panorama Properties
San Jacinto, California



Map Base: Google Earth 2013

Figure 2. Project Aerial Showing 2013 Site Conditions

3.3. Field Assessment

Ms. Karen Kirtland of NRAI and Mr. Richard Montijo of SWCA Environmental Consultants (subconsultant to NRAI), conducted a biological assessment of the proposed parking area on February 2, 2018. The field team evaluated the surrounding habitats, making notes on the general and sensitive biological resources present and taking representative photographs. The survey included focused habitat assessment surveys for species covered under the MSHCP survey requirements.

4.0 Results

4.1 Weather, Topography and Soils

Weather at the beginning of the survey was 52 degrees Fahrenheit, with scattered cirrus clouds and variable winds from one to two miles per hour. By the end of the survey, the temperature was 79 degrees Fahrenheit, with scattered cirrus clouds and a one to two mile per hour wind.

The property is generally flat with no visible slope.

The two soils on the property are San Emigdio fine sandy loam (SeA) and San Emigdio fine sandy loam, deep (SfA). Both soils are found on zero to two percent slopes (Figure 3, Soil Survey Staff 2018). San Emigdio is a fine sandy loam made up of residuum from sedimentary rock. It is a well-drained, non-saline to very slightly saline soil found on alluvial fans. San Emigdio soils are classified as non-hydric. They never pond and rarely flood.

4.2 Land Uses

The property has been regularly disked for weed control since at least 1996 (Photo 1).



Photo 1. Disking of the property. Looking northeast from the southeast corner.



Source: Natural Resource Conservation Service 2013

Figure 3. Original Soils Distribution Mapped by the NRCS

Commercial Development
Panorama Properties
San Jacinto, California

The surrounding areas are occupied by rural residential to the west, agricultural property to the east, and residential development to the north, and a small pocket park to south.

4.3 Plant Communities

The only plant community present on the property is composed of ruderal (weedy) non-native plants (Photo 2). A list of all plant species observed is provided in Appendix A.



Photo 2. Ruderal (weedy growth at the northern end of the property. Looking east.

4.4 Wildlife

Wildlife activity was limited. Bird species observed included Eurasian collared dove (*Streptopelia decaocto*), killdeer (*Charadrius vociferus*), house finch (*Passer domesticus*) and house sparrow (*Passer domesticus*).

Both Botta's pocket gopher (*Thomomys bottae*) and Beechey's ground squirrel (*Spermophilus beecheyi*) were active on the property (Photo 3). No amphibian or reptile species were observed.

A list of all wildlife species observed is provided in Appendix A.

4.5 MSHCP Consistency Analysis

The property is located within the MSHCP Conservation Area. Section 6 of the MSHCP states that all projects must be reviewed for compliance with plan policies pertaining to Riparian/Riverine resources, Criteria resources, Narrow Endemic Plant Species, urban/wildlands interface, and additional survey needs as applicable.



Photo 3. Beechey ground squirrel burrow.

4.5.1 Criteria Area and Narrow Endemic Plant Species

The Western Riverside County MSHCP did not identify the property has having habitat for any Criteria Area or Narrow Endemic Plant species

4.5.2 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2)

4.5.2.1 Riparian/Riverine Areas

Riparian/Riverine Areas are defined by the MSHCP as *“lands which contain Habitat dominated by tress [sic], shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year”*.

Project Findings

The property is almost flat and has been disked for weed control on a regular basis. There are no riparian or riverine areas on the property.

4.5.2.2 Vernal Pools

Vernal pools are defined by the MSHCP as *“seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. . . Evidence concerning the persistence of an area’s wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records”* (Riverside County Transportation and Land Management Agency, website address: <http://www.rctlma.org>).

Project Findings

The property is flat and heavily disturbed. The soil is unsuitable for the formation of vernal pools, being a sandy loam that is well-drained. The field team surveyed for vernal pools but the level of disturbance, soil type and recent human activity eliminate the formation of vernal pools.

4.5.2.3 Vernal Pool Fairy Shrimp

Vernal pool fairy shrimp (*Branchinecta lynchi*) is found in grasslands in ponded areas such as vernal pools, cattle watering holes, basins, etc. Fairy shrimp are confined to temporary pools that fill in spring and evaporate by late spring to early summer.

In southern California, this species is found primarily in the interior of western Riverside County, central Santa Barbara County, and eastern Orange County and more recently in Los Angeles County.

Since most pools preferred by fairy shrimp are found in flat areas, many have been lost to agricultural activities and residential development. The limited extent of available habitat, plus the ongoing loss has resulted in the vernal pool fairy shrimp being listed as threatened by the USFWS.

Project Findings

As described in the vernal pool section, the property appears unsuitable for the formation of vernal pools. The soils are unsuitable for the formation of long-term ponds, and no obligate wetland perennial plant species were observed. There are no other sources of standing water, such as cattle ponds or watering holes that would provide suitable habitat for the vernal pool fairy shrimp.

4.5.2.4 Riverside Fairy Shrimp

Riverside fairy shrimp (*Streptocephalus woottoni*) are known only from ephemeral pools in farmlands and similar open, flat terrain. Fairy shrimp are confined to temporary pools that fill in spring and evaporate by late spring to early summer.

The Riverside fairy shrimp is known only from southern Orange and western Riverside and San Diego Counties. Ongoing farming and development in these areas has resulted in the loss and degradation of these habitats. Therefore, the USFWS has listed the Riverside fairy shrimp as endangered.

Project Findings

As described in the vernal pool section, the property appears unsuitable for the formation of vernal pools. The soils are unsuitable for the formation of long-term ponds, and no obligate wetland perennial plant species were observed. There are no other sources of standing water, such as cattle ponds or watering holes that would provide suitable habitat for the Riverside fairy shrimp.

4.5.3 Additional Survey Needs and Procedures (Section 6.3.2)

4.5.3.1 Burrowing Owl

The burrowing owl (*Athene cunicularia hypugaea*) is a resident species in lowland areas of southern California (Garrett & Dunn 1980). It prefers open areas for foraging and burrowing and is found widely scattered in open desert scrub. This species is scarce in coastal areas, being found mainly in agricultural and grassland habitats. The largest remaining numbers are in the Imperial Valley, where it is common in suitable habitat adjacent to the agricultural fields.

The burrowing owl prefers large flat open areas for nesting and hunting (Garrett & Dunn 1981). This species lives in burrows constructed by other ground-dwelling species in grassy or sparse shrubby

habitat. Burrowing owls also take over other types of burrows, including manmade objects such as pipes. This species forages low over the ground surface for insect prey, and seldom flies very high in the air.

As a result of coastal development, the burrowing owl is declining in coastal habitats. The California Department of Fish and Wildlife (CDFW) has designated the burrowing owl as a California Species of Special Concern (CSC). These species are so designated because “declining population levels, limited ranges and/or continuing threats have made them vulnerable to extinction.” (California Department of Fish and Wildlife 2012).

Project Findings

The property is within the survey area for the burrowing owl. Habitat for burrowing owl was assessed in accordance with MSHCP “Burrowing Owl Survey Instructions”. The assessment included looking for burrowing owl burrows, whitewash, pellets, animal remains and other burrowing owl indicators.

Burrowing owls need sparse shrubby habitat (such as grasslands and desert scrub) to provide food for their insect and other small prey items. The property does not contain any sparse shrubby habitats or similar grassland habitats preferred by this species. All Beechey ground squirrel burrows were occupied by ground squirrels. No sign of burrowing owl or burrowing owl use was observed.

Most of the available habitat is highly disturbed.

4.5.4 Guidelines Pertaining to the Urban/Wildland Interface (Section 6.1.4)

The Urban/Wildland Interface guidelines of the MSHCP address indirect effects associated with locating development in the MSHCP Conservation Area near wildlands or other open space areas.

Project Findings

The property is surrounded by several types of development. There are no impacts to adjacent wildlands or other open space areas.

4.5.5 Habitat Conservation Plan for the Stephens Kangaroo Rat

The species objectives for the Stephens kangaroo rat (SKR) in the Western Riverside MSHCP were designed to incorporate the objectives and be consistent with the Long-Term Stephens Kangaroo Rat Habitat Conservation Plan (SKR Plan). Any projects that are within the MSHCP boundaries must meet the SKR Plan requirements.

Project Findings

The project is located within the SKR fee area.

4.5.6 Project Relationship to Reserve Assembly, San Jacinto Valley Area Plan (Section 3.3.13)

Reserve assembly is concerned with the identification of specific areas that are necessary to assemble a sufficiently large and diverse property to protect the resources of concern for that reserve. The smallest unit of a Reserve Assembly is the Cell, which individually form the basis for Cell Groups that make up Area Plans. The property is within the San Jacinto Valley Area Plan.

All the Cells have been identified during the preparation of the MSHCP and form the basis for identifying areas of sensitivity. Areas outside Cells are generally not considered to have a high sensitivity for the species identified by the MSHCP, although they could have resources such as riparian habitat that are sensitive and require additional analysis.

Project Findings

The property is not within a cell that is part of the Reserve Assembly for the San Jacinto Valley Area Plan, nor is it adjacent to any Criteria Cells.

4.6 Jurisdictional Waters

4.6.1 Army Corps of Engineers

The Corps regulates discharges of dredged or fill material into waters of the United States. These watersheds include wetlands and non-wetland bodies of water that meet specific criteria. The lateral limit of Corps jurisdiction extends to the Ordinary High Water-Mark (OHWM) and to any wetland areas extending beyond the OHWM; thus, the maximum jurisdictional area is represented by the OHWM or wetland limit, whichever is greater.

Corps regulatory jurisdiction pursuant to Section 404 of the Clean Water Act is founded on a connection or nexus between the water body in question and interstate (waterway) commerce. This connection may be direct, through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce, or may be indirect, through a nexus identified in the Corps regulations.

Project Findings

The probable former use of the property for agriculture (a past common use in this part of San Jacinto), as well as the development of surrounding agricultural and residential development has eliminated any drainage across the property. There are no waters or wetland habitats that would come under the jurisdiction of the Corps.

4.6.2 Regional Water Quality Control Board

The Corps has delegated the authority for use of 404 permits to each individual state. The use of a 404 permit in California is regulated by the State Water Resources Control Board (SWRCB) under Section 401 of the Clean Water Act regulations. The Board has authority to issue a 401 permit that allows the use of a 404 permit in the state, with the authority in the state being vested in regional offices known as Regional Water Quality Control Boards (RWQCB).

Under the Porter-Cologne Act of 2003, the SWRCB has extended its responsibilities to include impacts to water quality from non-point source pollution.

In addition, the SWRCB has the responsibility to require that projects address ground water and water quality issues, which would be evaluated as part of the geotechnical and hydrology studies. Their authority extends to all waters of the State (of California).

Project Findings

The probable former use of the property for agriculture (a past common use in this part of San Jacinto), as well as the development of surrounding agricultural and residential development has eliminated any drainage across the property. There are no waters or wetland habitats that would come under RWQCB protection.

4.6.3 California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW), through provisions of the State of California Administrative Code, is empowered to issue agreements for any alteration of a river, stream or lake where fish or wildlife resources may adversely be affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an intermittent flow of water. Lateral limits of

jurisdiction are not clearly defined, but generally include any riparian resources associated with a stream or lake, CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream or lake as defined by CDFW.

Project Findings

The probable former use of the property for agriculture (a past common use in this part of San Jacinto), as well as the development of surrounding agricultural and residential development has eliminated any drainage across the property. There are no waters or wetland habitats that would come under the jurisdiction of the CDFW.

4.7 Raptors, Migratory Birds, and Habitat

Most of the raptor species (eagles, hawks, falcons and owls) are experiencing population declines because of habitat loss. Some, such as the peregrine falcon, have also experienced population losses because of environmental toxins affecting reproductive success, animals destroyed as pests or collected for falconry, and other direct impacts on individuals. Only a few species, such as the red-tailed hawk and barn owl, have expanded their range despite or a result of human modifications to the environment. As a group, raptors are of concern to state and federal agencies.

Raptors and all migratory bird species, whether listed or not, also receive protection under the Migratory Bird Treaty Act (MBTA) of 1918. The MBTA prohibits individuals to kill, take, possess or sell any migratory bird, bird parts (including nests and eggs) except according to regulations prescribed by the Secretary of the Interior Department (16 U. S. Code 703).

Additional protection is provided to all bald and golden eagles under the Bald and Golden Eagle Protection Act of 1940, as amended. State protection is extended to all birds of prey by the CDFW Code, Section 2503.5. No take is allowed under these provisions except through the approval of the agencies or their designated representatives.

Project Findings

There is no suitable nesting habitat for raptors and migratory birds on the property. The property is in an agricultural, rural residential and residential area, and is located on the corner of two major streets in the City of San Jacinto. The lack of diverse plant cover, existing noise levels and human activity in the immediate vicinity has substantially reduced nesting on the property.

4.8 Habitat Fragmentation and Wildlife Movement

Wildlife movement and the fragmentation of wildlife habitat are recognized as critical issues that must be considered in assessing impacts to wildlife. In summary, habitat fragmentation is the division or breaking up of larger habitat areas into smaller areas that may or may not be capable of independently sustaining wildlife and plant populations. Wildlife movement (more properly recognized as species movement) is the temporal movement of species along distinct types of corridors. Wildlife corridors are especially important for connecting fragmented wildlife habitat areas.

Project Findings

The property is in area already fragmented and is surrounded by paved roads, agriculture and residential development. There are no native habitats left in the nearby surrounding areas, and impacts to wildlife movement and habitat fragmentation have already occurred. There will be no additional fragmentation of habitat.

5.0 Discussion

5.1 General Biological Resources

There will be a loss of approximately 8.95 acres of ruderal habitat. This impact is not considered to be significant.

5.2 MSHCP Consistency Analysis

5.2.1 Criteria Area Plant Species and Narrow Endemic Plant Species

There are no Criteria Area Plant Species or Narrow Endemic Plant Species identified as potentially present on the property.

5.2.2 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2)

There is no riparian/riverine areas or vernal pools and therefore no requirement to protect species associated with these habitats.

5.2.3 Additional Survey Needs and Procedures (Section 6.3.2)

The burrowing owl is not resident on the property. However, there are active Beechey ground squirrel burrows that if abandoned may be suitable for burrowing owl over time. We recommend the following prior to construction:

- A pre-construction burrowing owl breeding bird survey following the recommended guidelines of the MSHCP will be required to determine if nesting is occurring.
- Occupied nests will not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist verifies through non-invasive methods that either (a) the adult birds have not begun egg-laying and incubation; or (b) the juveniles from the occupied nests are foraging independently and are capable of independent survival.
- If the biologist is not able to verify one of the above conditions, then no disturbance shall occur during the breeding season within a distance determined by the qualified biologist for each nest or nesting site. For the burrowing owl, the recommended distance is a minimum of 160 feet.

Mitigation requirements under the MSHCP are not clear for species, such as these, which are not within conserved areas for Criteria Cells. For the burrowing owl, it may be sufficient to passively relocate burrowing owls after nesting. If mitigation is required, a Determination of Biological Equivalent or Superior Preservation Plan (DBESP) must be prepared that includes suitable mitigation and project measures to ensure proper implementation of the mitigation.

5.2.4 Guidelines Pertaining to the Urban/Wildlands Interface (Section 6.1.4)

The Best Management Practices (BMPs) pertaining to Urban/Wildlands Interface issues are not applicable to this project. It is located in a developed area of San Jacinto and no Wildlands will be affected.

5.2.5 Habitat Conservation Plan for the Stephens Kangaroo Rat

The project proponent is required to pay the Stephens kangaroo rat fee required under the Long-Term Stephens Kangaroo Rat Habitat Conservation Plan.

5.2.6 Project Relationship to Reserve Assembly, San Jacinto Valley Area Plan (Section 3.3.9)

The property is not within a Cell proposed for acquisition in the San Jacinto Valley Area Plan (Plan) nor is it adjacent to any Criteria Cells. There will be no direct or indirect impacts to Criteria Cells and will not affect Plan Conservation Area assembly.

5.3 Jurisdictional Waters

The property does not have jurisdictional waters. No further action is required.

5.4 Raptors and Nesting Habitats

There is no shrub or tree habitat suitable for nesting on the property. Ground nesting habitat has been disturbed by disking for weed control, however, the presence of killdeer during the survey indicates that nesting habitat may be present for this species and other ground-nesting species.

- A breeding bird survey will be required to determine if nesting is occurring. Occupied nests will not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist verifies through non-invasive methods that either (a) the adult birds have not begun egg-laying and incubation; or (b) the juveniles from the occupied nests are foraging independently and are capable of independent survival.
- If the biologist is not able to verify one of the above conditions, then no disturbance shall occur during the breeding season within a distance determined by the qualified biologist for each nest or nesting site.

This work can be done in conjunction with the burrowing owl survey.

There will be no significant impacts to foraging habitats for native birds.

5.5 Habitat Fragmentation and Wildlife Movement

The project will not add to the ongoing fragmentation of habitat in this area, nor will it substantially affect wildlife movement in this area of Riverside County.

6.0 References Cited or Reviewed

- Baldwin, B.G. and Goldman, D.H., 2012. *The Jepson Manual: Vascular Plants of California*. University of California Press.
- Burt, W. H., 1986. *A Field Guide to the Mammals in North American North of Mexico*. Houghton Mifflin Company, Boston, Massachusetts.
- California Department of Fish and Wildlife, 2017. *Special Animals List*.
- Garrett, K. and J. Dunn, 1981. *Birds of Southern California*. Los Angeles Audubon Society. The Artisan Press, Los Angeles, California.
- Grenfell, W. E., M. D. Parisi, and D. McGriff, 2003. *A Check-list of the Amphibians, Reptiles, Birds and Mammals of California. California Wildlife Habitat Relationship System*, California Department of Fish and Wildlife, Sacramento, California.
- Hickman, J. C., ed. 1993. *The Jepson Manual: Higher Plants of California*. University of California Press.
- Munz, P.A., 1974. *A Flora of Southern California*. University of California Press, Berkeley, California.
- Soil Survey Staff, Natural Resources Conservation Service, 2017. United States Department of Agriculture. Web Soil Survey. Available online at <http://websoilsurvey.nrcs.usda.gov/>. Accessed January 23, 2018.

Appendix A - Plant and Animal Species Observed

*denotes non-native plants

ANGIOSPERMAE: DICOTYLEDONES

Amaranthaceae

**Amaranthus albus*

Asteraceae

Helianthus annuus

Boraginaceae

Amsinckia intermedia

Chenopodiaceae

**Salsola tragus*

Fabaceae

Acemisson glaber

Malvaceae

**Malva parviflora*

ANGIOSPERMAE: MONOCOTYLEDONAE

Poaceae

**Avena barbata*

**Bromus madritensis ssp. rubens*

**Hordeum murinum*

**Schismus barbatus*

DICOT FLOWERING PLANTS

Amaranthus family

White tumbleweed

Sunflower family

Annual sunflower

Borage family

Fiddleneck

Saltbush family

Russian thistle

Pea family

Deer weed

Mallow family

Cheeseweed

MONOCOT FLOWERING PLANTS

Grass family

Slender wild oats

Red brome

Mouse barley

Mediterranean grass

Taxonomy and nomenclature follow Baldwin & Goldman 2012 and Munz 1974.

Animals

AVES

Charadriidae

Charadrius vociferus

Columbidae

Columba livia

Streptopelia decaocto

Sylviidae

Regulus calendula

Parulidae

Setophaga coronata

Fringillidae

Haemorhous mexicanus

Passeridae

Passer domesticus

Leporidae

Sylvilagus audubonii

Sciuridae

Spermophilus beecheyi

Spermophilus tereticaudus

Geomyidae

Thomomys bottae

Nomenclature follows Grenfell et al. 2003.

BIRDS

Plovers and relatives

Killdeer

Pigeons and doves

Rock pigeon

Eurasian collared-dove

Old World warblers, gnatcatchers and allies

Ruby-crowned kinglet

Wood warblers

Yellow-rumped warbler

Finches

House finch

Old World sparrows

House sparrow

Rabbits and hares

Audubon's cottontail

Squirrels, chipmunks and marmots

Beechey ground squirrel

Round-tailed ground squirrel

Pocket gophers

Botta's pocket gopher

Appendix B - Definitions of Species Status Classification

FED: Federal Classifications

END	Taxa listed as endangered
THR	Taxa listed as threatened
PE	Taxa proposed to be listed as endangered
PT	Taxa proposed to be listed as threatened
C2*	The U.S. Fish and Wildlife Service (USFWS) revised its classifications of candidate taxa (species, subspecies, and other taxonomic designations). Species formerly designated as "Category 1 Candidate for listing" are now known simply as "Candidate". The former designation of "Category 2 Candidate for listing" has been discontinued. The USFWS will continue to assess the need for protection of these taxa and may, in the future, designate such taxa as Candidates. NRAI has noted the change in species status by marking with an asterisk (*) those C2 candidates that were removed from the list.
C	Candidate for listing. Refers to taxa for which the USFWS has sufficient information to support a proposal to list as Endangered or Threatened and issuance of the proposal is anticipated but precluded at this time.
BCC	Bird of Conservation Concern
ND	Not designated as a sensitive species

STATE: State Classifications

END	Taxa listed as endangered
THR	Taxa listed as threatened
CE	Candidate for endangered listing
CT	Candidate for threatened listing
CFP	California Fully Protected. Species legally protected under special legislation enacted prior to the California Endangered Species Act.
SSC	Species of Special Concern. Taxa with populations declining seriously or that are otherwise highly vulnerable to human development.
SA	Special Animal. Taxa of concern to the California Natural Diversity Data Base regardless of their current legal or protected status.
WL	Watch list.
ND	Not designated as a sensitive species

CNPS: California Native Plant Society Classifications

- 1A Plants presumed by CNPS to be extinct in California
- 1B Plants considered by CNPS to be rare or endangered in California and elsewhere
- 2P Plants considered by CNPS to be rare, threatened or endangered in California, but which are more common elsewhere.
- 3 Review list of plants suggested by CNPS for consideration as endangered but about which more information is needed.
- 4 Watch list of plants of limited distribution whose status should be monitored.

CNPS: Threat Codes

- .1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- .2 Fairly endangered in California (20-80% occurrences threatened)
- .3 Not very endangered in California (<20% of occurrences threatened or no current threats known)